# SCREAMIN' EAGLE STAGE 1 KIT FOR EFI MODELS

# **GENERAL**

#### **Kit Number**

29400129

#### Models

For model fitment information, see P&A Retail Catalog or the Parts and Accessories section of www.harley-davidson.com (English only).

### **Additional Parts Required**

Proper installation of this kit requires the use of Digital Technician<sup>™</sup> at a Harley-Davidson dealer.

This kit requires the separate purchase of Air Cleaner/Degreaser (99883-88T) which is available from a Harley-Davidson dealer.

This kit requires the separate purchase of Loctite® 243 Medium Strength Threadlocker and Sealant - Blue (Part Number 99642-

# **A**WARNING

The rider's safety depends upon the correct installation of this kit. Use the appropriate service manual procedures. If the procedure is not within your capabilities or you do not have the correct tools, have a Harley-Davidson dealer perform the installation. Improper installation of this kit could result in death or serious injury. (00333a)

## NOTE

This instruction sheet references service manual information. A service manual for your model motorcycle is required for this installation and is available from a Harley-Davidson dealer.

#### **Kit Contents**

See Figure 1 and Table 1.

# **NOTES**

This Stage 1 kit is intended for High Performance applications only. This engine related performance part is legal for sale or use in California on pollution controlled motor vehicles. Engine related performance parts are intended for the experienced rider only.

The air cleaner contained in this kit is designed to perform with this kit only. Any other combination of components is not confirmed legal for street use.

# **REMOVAL**

- Remove main fuse. Refer to main fuse in service manual.
- See Figure 1 and Table 1. Remove stock air cleaner cover (A). Discard remaining parts.

- Remove fuel tank. Refer to Section 4, FUEL SYSTEM, in service manual.
- 4. Remove and discard support induction module bracket

### INSTALLATION

**Install Air Cleaner** 

# WARNING

The element in this kit is specifically designed for use with the OE (original equipment) cover. Using this kit with an air cleaner cover other than the OE cover could lead to failure of the element faceplate. The kit may be used in conjunction with other H-D accessory covers provided the appropriate adapter recommended in those kits is used. If the element faceplate fails the cover could detach possibly distracting the rider which could result in death or serious injury. (00400b)

#### NOTE

When servicing the air cleaner, apply Loctite® 243 (blue) 99642-97 to threads of all fasteners.

- See Figure 1. Peel the protective strip off the gasket (6) and place the adhesive side onto the backplate (11). Align to the equally spaced screw holes, and position the gasket carefully before firmly pressing the gasket into place.
- Install two O-rings (5) from kit in grooves around breather screw holes on induction module side of backplate assembly. Install two O-rings (5) from kit in grooves in underside of head of breather screws (7).
- Insert new breather screws (7) through the backplate (11).
- Apply Loctite 243 (blue) to breather screw threads and mating tapped holes in cylinder head.
- Thread screws into cylinder head but do not tighten.
- Thread backplate screws (3) all the way through the backplate (2) until the screw threads are exposed on back side of backplate. Apply Loctite 243 (blue) to backplate screw threads.
- Thread backplate screws into induction module. Do not tighten completely at this time.
- Thread air cleaner element mounting studs (1) into the backplate (11). Do not tighten completely at this time.
- Alternately tighten two breather screws (7) to 120-144 in-Ibs (13.6-16.3 Nm).
- 10. Tighten three backplate screws (3) to 55-60 in-lbs (6.2-6.8 Nm).

11. Tighten three element mounting studs (1) to 55-60 **in-lbs** (6.2-6.8 Nm).

#### Install Air Cleaner Element and Cover

#### NOTES

This is a dry air filter. Do not apply oil to the filter element.

Whenever the air cleaner cover is installed, apply Loctite 243 (blue) to the air cleaner cover screw (B).

- See Figure 1. Secure air filter element (2) to air cleaner mounting studs (1) using screws (4). Tighten screws to 55-60 in-lbs (6.2-6.8 Nm).
- Carefully remove and discard the original air cleaner cover insert from air cleaner (12). Remove any residual adhesive on the cover with mineral spirits.
- To verify surface cleanliness, clean the insert area with a mixture of 50 to 70% isopropyl alcohol and 30 to 50% distilled water. Allow to dry thoroughly.

#### NOTE

The air cleaner cover insert in this kit utilizes  $3M^{TM}$  Dual Lock<sup>TM</sup> Reclosable tape which can be separated and pressed back together for service access to the air cleaner cover screw.

- Peel liner from adhesive backing of air cleaner cover insert (12). Position insert over air cleaner cover (A) without touching adhesive on cover surface. Line up insert with recess in air cleaner cover.
- Press air cleaner cover insert firmly against the cover all around, and hold pressure for 30 seconds. After releasing pressure, avoid direct contact with the insert for about 20 minutes.

#### **NOTES**

Allow at least 24 hours after applying the insert before exposing the area to vigorous washing, strong water spray, or extreme weather. The adhesive bond will increase to maximum strength after about 72 hours at normal room temperatures.

- 6. Insert adapter spacer (10) into air cleaner adapter (9).
- Carefully pry air cleaner insert (12) off of the air cleaner cover to access the air cleaner cover mounting screw hole.
- Align air cleaner adapter (9) with air filter element channel and mounting screws. Set adapter into place, ensuring adapter rib fits fully into element channel.

 Align air cleaner adapter (9) then assemble and tighten the air cleaner cover screw (8) securely 36-60 in-lbs (4.1-8.0 Nm).

## **Final Assembly**

Install main fuse.

#### Recalibrate ECM

#### **NOTICE**

You must recalibrate the ECM when installing this kit. Failure to properly recalibrate the ECM can result in severe engine damage. (00399b)

Download the new ECM calibration using the Digital Technician  $^{\text{TM}}$  at a Harley-Davidson dealer.

# **MAINTENANCE**

#### Air Cleaner Element Maintenance

#### **NOTES**

This is a dry air filter (2). Do not apply oil to the filter element.

When servicing the air cleaner, apply Loctite 243 (blue) to threads of all fasteners.

- See Figure 1. Remove air cleaner and inspect the filter element (2) every 5000 mi (8000 km) or more often under dusty conditions.
- 2. Clean filter element as follows:
  - a. Remove and wash element by immersing it, on edge, in a shallow pan containing enough Air Cleaner/Degreaser to cover no more than 3/4 the depth of the filter pleats. Do not let dirty solution get inside the element. Carefully "roll" the element in the solution around its perimeter until the entire outer surface of the filter pleats has been soaked.
  - Remove filter element from cleaner/degreaser and allow five minutes for the cleaner to dissolve the dirt.
  - c. From the inside out, rinse the element with cold water. Shake off excess water, and allow the element to air dry. Do not dry with compressed air.
- 3. Install air cleaner insert (12).

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# **SERVICE PARTS**

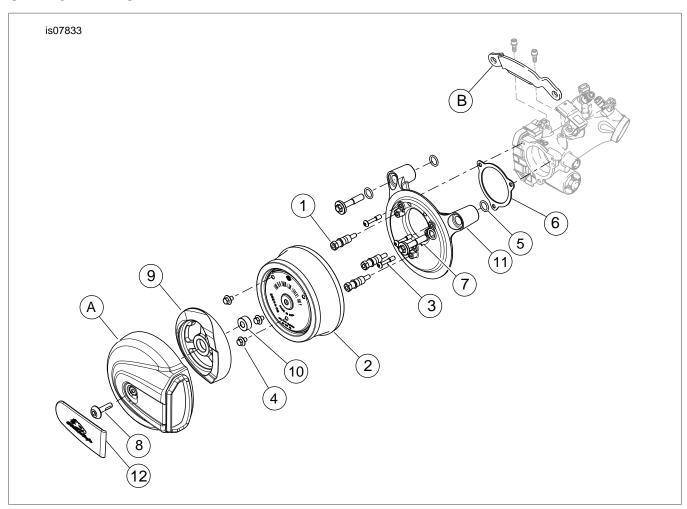


Figure 1. STAGE I AIR CLEANER

**Table 1. Service Parts Table** 

Item	Description (Quantity)	Part Number
1	Mounting stud, element (3)	8250
2	Air filter element	29244-08
3	Screw, hex socket button head cap (3)	869
4	Large flange screw (3)	3563
5	O-ring #2-113 (4)	11292
6	Gasket throttle body	29241-08
7	Breather screw	29267-08A
8	Air cleaner cover screw	29327-94
9	Air cleaner cover adapter	29400159
10	Spacer, air cleaner cover adapter	29400161
11	Back plate, ETC	29000099
12	A-C cover insert	61300299
Items mentio	ned in text, but not included in kit:	
А	Air cleaner cover	
В	Induction module bracket (remove and discard)	

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